



Single Family Residential Stormwater Management Plan

GRASS SWALE

Definition:

Grass swales are grass-lined channels that provide conveyance, water quality treatment and flow attenuation of runoff from driveways.

Constraints:

- Grass swales shall not be used to treat rooftops or other non-linear applications - they are to be used for driveways
- Grass swales should be installed parallel to driveway - if driveway slope exceeds 8%, swales may be installed across the contour (diverge from driveway) at 2% slope

Design Guidance:

- Swales must be installed in accordance with the attached detail
- Swales must have a min. 2 ft. bottom width and 3:1 (H:V) side slopes
- The channel slope should be less than or equal to 4%
- Check dams may be used to provide grade control in steeper applications up to 8%
- Swale length shall equal or exceed the driveway length treated

Installation:

- Final grading of a grass swale should not take place until surrounding site is stabilized
- Minimize compaction of swale bottom – use lightweight, wide-tracked equipment
- The grass swale bottom shall have a minimum of 4" topsoil prior to seeding
- The bottom of the swale shall be protected with erosion control matting
- A thick grass cover shall be provided in the swale bottom and side slopes

Construction Inspections:

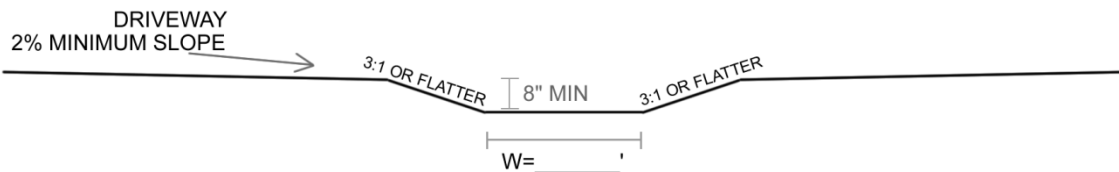
Inspection shall occur upon completion of final grading and stabilization.

Maintenance:

After installation, grass swales will be delineated on the site sketch with an easement. The sketch and this Stormwater Management Plan must be attached to the executed Operation & Maintenance Agreement, which must be recorded in the land records of Allegany County prior to issuance of Occupancy Permit. The swale is subject to maintenance inspection by Allegany County on a periodic basis.

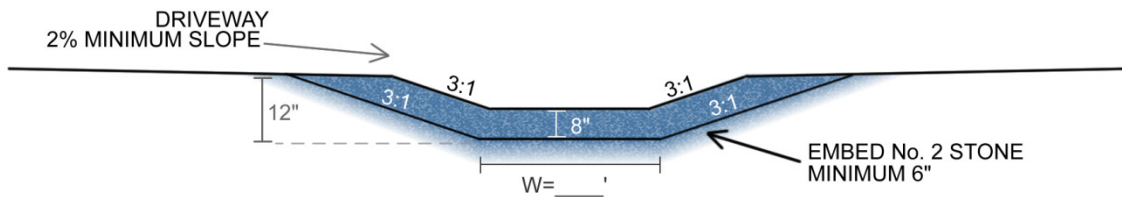
A dense cover of grass 4" tall or greater must be maintained. Sparsely vegetated areas need to be re-seeded. Grass swale maintenance is generally no different than that required of a lawn. Swale should be mowed regularly.

GRASS SWALE CROSS SECTION (Channel Slope \leq 4%)



***If Channel Slope between 4% and 8%, use check dams as specified below**

CHECK DAM CROSS SECTION



PROFILE WITH CHECK DAMS

